



Electronic Filing System (EFS) Data

Electronic Patent Application Submission

USPTO Use Only

EFS ID: 50100
Application ID: 10619057 

Title of Invention: Method and Apparatus for Improving Signal-To-Noise Ratio for Hard Disk Drives

First Named Inventor: Edward Harris

Domestic/Foreign Application: Domestic Application

Filing Date: 2003-07-14

Effective Receipt Date: 2003-11-03

Submission Type: Information Disclosure Statement

Filing Type:

Confirmation number: 6888

Attorney Docket Number: 075903-199

Total Fees Authorized:

Digital Certificate Holder: cn=John L. DeAngelis,ou=Registered Attorneys,ou=Patent and Trademark Office,ou=Department of Commerce,o=U.S. Government,c=US
Certificate Message Digest: 04ea27130b78a7877287026b221ff2e49abf4429



TRANSMITTAL

Electronic Version v1.1
Stylesheet Version v1.1.0

Title of Invention	Method and Apparatus for Improving Signal-To-Noise Ratio for Hard Disk Drives
Application Number:	10/619057
Date:	2003-07-14
First Named Applicant:	Edward B. Harris
Confirmation Number:	6888
Attorney Docket Number:	075903-199

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John L. DeAngelis Jr. Registered Number: 30,622	/John L. DeAngelis, Jr./	Attorney

Documents being submitted us-ids	Files Agere199-usidst.xml us-ids.dtd us-ids.xsl
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Comments



ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18
Stylesheet Version v18.0

Title of Invention	Method and Apparatus for Improving Signal-To-Noise Ratio for Hard Disk Drives
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Application Number: 10/619057
Confirmation Number: 6888
First Named Applicant: Edward Harris
Attorney Docket Number: 075903-199
Art Unit: 2651
Search string: (4841502 or 4926408 or 4972396 or 4998238
or 5161137 or 5263008 or 5327417 or 5448539
or 5469418 or 5568454 or 5602693 or 5631893
or 5796557 or 6163439 or 6172836 or 6181504
or 6204660).pn.



US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	4841502	1989-06-20	Murakami, et al			
	2	4926408	1990-05-15	Murakami, et al			
	3	4972396	1990-11-20	Rafner			
	4	4998238	1991-03-05	Mizunoe, et al			
	5	5161137	1992-11-03	Suzuki			
	6	5263008	1993-11-16	Fujio, et al			
	7	5327417	1994-07-05	Tanaka, et al			
	8	5448539	1995-09-05	Kamioka			
	9	5469418	1995-11-21	Satoh, et al			
	10	5568454	1996-10-22	Shima, et al			
	11	5602693	1997-02-11	Brunnett, et al			
	12	5631893	1997-05-20	Kang, et al			
	13	5796557	1998-08-18	Bagnell, et al			
	14	6163439	2000-12-19	Jeong			
	15	6172836	2001-01-09	Bang			

16	6181504	2001-01-30	Ahn
17	6204660	2001-03-20	Lee

Signature

Examiner Name	Date